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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,902	11/03/2003	Frank Eidam	BGEE 2 00025	4386
27885	7590	10/20/2005	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			BRITTAIN, JAMES R	
			ART UNIT	PAPER NUMBER

3677

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/699,902	<b>Applicant(s)</b> EIDAM, FRANK	
	<b>Examiner</b> James R. Brittain	<b>Art Unit</b> 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) 16-31 and 41-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 32-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group I and Group A in the reply filed on July 27, 2005 is acknowledged. The traversal is on the ground(s) that the species requirement is not burdensome. This is not found persuasive because there is a profound difference in the manner in which the two groups of species function and applicant has not stated that one species is an obvious variant of the other.

The requirement is still deemed proper and is therefore made FINAL.

Claims 16-31 and 41-63 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention or species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on July 27, 2005.

### ***Information Disclosure Statement***

The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR

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1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered.

Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6-10, 12, 15, 15, 32, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerwien et al. (DE 19961709) in view of Euler (US 4364615).

Gerwien et al. (figures 1-3) teaches locking ring structure assembled in a groove 16 of a device having a shaft 9 comprising an outer edge zone 2 and a radially inner circumferentially interrupted engagement zone which slants at an angle between 15° and 45°. The difference is that the device has an interrupted outer edge. It would have been obvious to have a closed outer edge in view of Euler (figures 1, 9) teaching the use of a closed outer edge being conventional in those environments when unneeded.

Claims 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerwien et al. (DE 19961709) in view of Euler (US 4364615) as applied to claim 32 above, and further in view of Perrow (US 6390925).

Further modification of the device of Gerwien et al. such that the groove has a shoulder and is asymmetric would have been obvious in view of Perrow (figure 9) in which the groove for the locking ring is asymmetric, has a shoulder 60 and is non-rectangular with a tapered surface so as to more securely mount the locking ring.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerwien et al. (DE 19961709) in view of Euler (US 4364615) as applied to claim 9 above, and further in view of Draving (US 2275058).

Further modification of the locking ring of Gerwien et al. such that the inner and outer portions are at the same angle would have been obvious in view of Draving (figures 13, 14) that teaches the use of such a configuration to be old and well known.

Claims 5 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerwien et al. (DE 19961709) in view of Euler (US 4364615) as applied to claims 1 and 32 above, and further in view of McCarrick et al. (US 5713692).

Further modification of the locking ring of Gerwien et al. such that the slanting angle is between 0° and 20° would have been obvious in view of McCarrick et al. (figures 9, 10) in which the slanting angle of the inner portions 16 is within this range.

Claims 3, 13, 33 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerwien et al. (DE 19961709) in view of Euler (US 4364615) as applied to claims 1, 13, 32 and 37 above, and further in view of either Bross (US 2975667) or Turbant et al. (FR 2821906).

Further modification of the locking ring of Gerwien et al. such that the angle of the inner zone is less than the angle of the outer zone would have been obvious in view of either Bross

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(figures 3, 4) or Turbant et al. (figure 1) who teach that it is desirable to provide such a configuration to a locking ring.

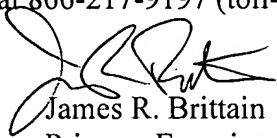
### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Moore (US 3408095, figure 6) teaches pertinent locking ring structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is (571) 272-7065. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James R. Brittain  
Primary Examiner  
Art Unit 3677

JRB